Figure 1: Modified Vaccinia Ankara virus (MVA) replication in chicken EB14 cells cultured in suspension in 20L- bioreactor in an animal-serum-free medium without any

exogneous growth factors.

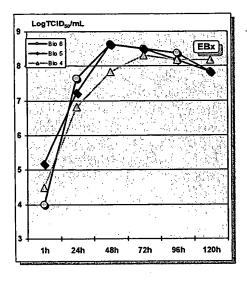


Figure 2: Replication of recombinant Modified Vaccinia Ankara virus (MVA) expressing Green Fluorescent Protein (GFP) in duck EB24 cells cultured in suspension in 2L-bioreactor in an animal-serum-free medium without any exogneous growth factors (SAFC Excell 66444).

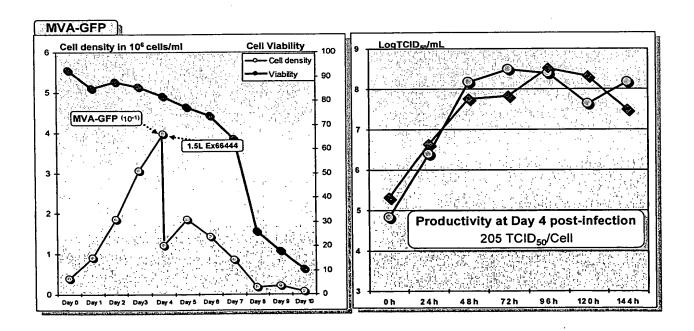


Figure 3: Replication of different types of vaccinia virus in duck EBx cells in three different commercially available serum free media (SFM).

3A: Duck EBx cells were infected at day 0 with the vaccinia lister strain 107 with three different SFM media (SAFC Excell 66444; Hyclone Megavir; and SAFC Excell MDCK Production). Vaccinia lister strain 107 does efficiently replicate in duck EBx cells as accredited by reaching infectious titers of 7 to 8 LogTCID50/ml at day 1.

3B: Duck EBx cells were infected at day 0 with the vaccinia lister strain 107 delta 22/20 with three different SFM media (SAFC Excell 66444; Hyclone Megavir; and SAFC Excell MDCK Production). Vaccinia lister strain 107 does efficiently replicate in duck EBx cells as accredited by reaching an infectious titer of 7 LogTCID50/ml at day 3.

3C: Duck EBx cells were infected at day 0 with the native (i.e wild type) modified vaccinia Ankara (MVA) strain with three different SFM media (SAFC Exell 66444; Hyclone Megavir; and SAFC Excell MDCK Production). Native MVA does replicate in duck EBx cells as accredited by reaching an infectious titer of 7.5 LogTCID50/ml at day 2.

3D: Duck EBx cells were infected at day 0 with recombinant modified vaccinia Ankara (MVA) strain expressing green fluorescent protein (GFP) with three different SFM media (SAFC Exell 66444; Hyclone Megavir; and SAFC Excell MDCK Production). Recombinant MVA-GFP does replicate in duck EBx cells as accredited by reaching an infectious titer of 7.5 LogTCID50/ml at day 2.

